CLAIMS

We claim:

5   1.   A system, comprising:

a processor;

a memory coupled to the processor and configured to store program instructions

10   executable by the processor to implement:

a knowledge automation engine comprising:

a knowledge interface to receive one or more checks and one or

15   more corresponding product check matrixes from a

knowledge repository, wherein the one or more

corresponding product check matrixes specify one or more

of packages and patches applicable to one or more product

issues;

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a fact interface to receive one or more facts describing a product

configuration;

wherein the knowledge automation engine automatically evaluates

25   a rule in the one or more checks against the one or more

facts to determine if the one or more product issues

specified by the one or more checks exists for the product

configuration; and

30   wherein if the one or more product issues are detected, the knowledge

automation engine applies one or more of packages and patches in

the one or more corresponding product check matrixes to correct the one or more product issues.

2.   The system as recited in claim 1, wherein the one or more product check matrixes comprises:

a package; and

a patch associated with the package.

3.   The system as recited in claim 2, wherein the association between the package and the patch is predefined.

4.   The system as recited in claim 2, wherein if the patch associated with the package is updated with a new patch in a database accessible by the knowledge automation engine, the association with the package is updated with the new patch.

5.   The system as recited in claim 1, wherein the one or more product check matrixes are stored on a database accessible by the knowledge automation engine.

6.   The system as recited in claim 1, wherein the one or more packages identified in one or more product check matrixes are stored in a separate database than the one or more product check matrixes.

7.   A method, comprising:

listing one or more packages in a product check matrix, wherein the one or more packages are related to a product issue; and

defining one or more check elements related to the product issue, wherein the one or more check elements includes a rule, wherein the rule may be evaluated against a fact to determine if a product issue is present on a product.

8.   The method as recited in claim 7, further comprising:

retrieving a fact from a fact repository about the product.

9. The method as recited in claim 7, further comprising:

evaluating the rule to detect one or more product issues.

10. The method as recited in claim 9, wherein if one or more product issues are detected, one or more packages from the product check matrix are applied.

11. The method as recited in claim 7, further comprising:

defining one or more associations between a package in the product check matrix and one or more patches.

12. The method as recited in claim 11, wherein if one or more patches corresponding to the one or more associations are updated, the one or more associations are updated with the one or more patches.

13. The method as recited in claim 7, further comprising:

defining one or more associations between a package in the product check matrix and one or more patches, wherein the one or more associations are defined according to patch updates applied to the one or more packages in a database accessible by a knowledge automation engine.

14. The method as recited in claim 7, further comprising:

disassociating one or more associations formed between a package and one or more patches if one or more patches are replaced.

15. The method as recited in claim 7, wherein one or more check elements are defined in a separate check.

16. The method as recited in claim 7, wherein the one or more check elements are defined with the product check matrix and are used with the product check matrix.

17.   The method as recited in claim 7, wherein the one or more check elements are selected from a group consisting of a check rule, a problem statement, and reference documentation.

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18.   A carrier medium comprising program instructions, wherein the program instructions are computer-executable to:

list one or more packages in a product check matrix, wherein the one or more packages are related to a product issue; and

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define one or more check elements related to the product issue, wherein the one or more check elements includes a rule, wherein the rule may be evaluated against a fact to determine if a product issue is present on a product.

15   19.   The carrier medium as recited in claim 18, wherein the program instructions are further executable to:

retrieve a fact from a fact repository about the product.

20.   The carrier medium as recited in claim 18, wherein the program 20   instructions are further executable to:

evaluate the rule to detect one or more product issues.

21.   The method as recited in claim 20, wherein if one or more product issues are detected, one or more packages from the product check matrix are applied.

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22.   The carrier medium as recited in claim 18, wherein the program instructions are further executable to:

define one or more associations between one or more packages in the product check matrix and one or more patches.

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23. The method as recited in claim 22, wherein if one or more patches corresponding to the one or more associations are updated, the one or more associations are updated with the one or more patches.

24. The carrier medium as recited in claim 18, wherein the program instructions are further executable to:

define one or more associations between one or more packages in the product check matrix and one or more patches, wherein the one or more associations are defined according to patch updates applied to the one or more packages in a database accessible by a knowledge automation engine.

25. The carrier medium as recited in claim 18, wherein the program instructions are further executable to:

disassociate one or more associations formed between one or more packages and one or more patches if one or more patches are replaced.

26. The carrier medium as recited in claim 18, wherein one or more check elements are defined in a separate check.

27. The carrier medium as recited in claim 18, wherein the one or more check elements are defined with the product check matrix and are used with the product check matrix.

28. The carrier medium as recited in claim 18, wherein the one or more check elements are selected from a group consisting of a check rule, a problem statement, and reference documentation.

29. A method, comprising:

listing one or more patches in a product check matrix, wherein the one or more patches are related to a product issue; and

defining one or more check elements related to the product issue, wherein the one or more check elements includes a rule, wherein the rule may be evaluated against a fact to determine if a product issue is present on a product.

30. The method as recited in claim 29, further comprising:
retrieving a fact from a fact repository about the product.

31. The method as recited in claim 29, further comprising:
evaluating the rule to detect one or more product issues.

32. The method as recited in claim 31, wherein if one or more product issues are detected, one or more patches from the product check matrix are applied.

33. The method as recited in claim 29, wherein one or more check elements are defined in a separate check.

34. The method as recited in claim 29, wherein the one or more check elements are defined with the product check matrix and are used with the product check matrix.

35. The method as recited in claim 29, wherein the one or more check elements are selected from a group consisting of a check rule, a problem statement, and reference documentation.

36. A carrier medium comprising program instructions, wherein the program instructions are computer-executable to:
list one or more patches in a product check matrix, wherein the one or more patches are related to a product issue; and

define one or more check elements related to the product issue, wherein the one or more check elements includes a rule, wherein the rule may be evaluated against a fact to determine if a product issue is present on a product.

37. The carrier medium as recited in claim 36, wherein the program instructions are further executable to:
retrieve a fact from a fact repository about the product.

38. The carrier medium as recited in claim 36, wherein the program instructions are further executable to:
evaluate the rule to detect one or more product issues.

39. The method as recited in claim 38, wherein if one or more product issues are detected, one or more patches from the product check matrix are applied.

40. The carrier medium as recited in claim 36, wherein one or more check elements are defined in a separate check.

41. The carrier medium as recited in claim 36, wherein the one or more check elements are defined with the product check matrix and are used with the product check matrix.

42. The carrier medium as recited in claim 36, wherein the one or more check elements are selected from a group consisting of a check rule, a problem statement, and reference documentation.